SIEMENS

Data sheet 3RT1066-6LA06



power contactor, AC-3e/AC-3 300 A, 160 kW / 400 V, without operating mechanism 3-pole, auxiliary contacts 2 NO + 2 NC main circuit: busbar control and auxiliary circuit: screw terminal

product brand name	SIRIUS
product designation	Power contactor
product type designation	3RT1
General technical data	
size of contactor	S10
product extension	
 function module for communication 	No
auxiliary switch	Yes
power loss [W] for rated value of the current	
 at AC in hot operating state 	66 W
 at AC in hot operating state per pole 	22 W
type of calculation of power loss depending on pole	quadratic
insulation voltage	
 of main circuit with degree of pollution 3 rated value 	1 000 V
 of auxiliary circuit with degree of pollution 3 rated value 	500 V
surge voltage resistance	
 of main circuit rated value 	8 kV
 of auxiliary circuit rated value 	6 kV
maximum permissible voltage for protective separation between coil and main contacts according to EN 60947-1	690 V
shock resistance at rectangular impulse	
• at AC	8,5g / 5 ms, 4,2g / 10 ms
• at DC	8,5g / 5 ms, 4,2g / 10 ms
shock resistance with sine pulse	
• at AC	13,4g / 5 ms, 6,5g / 10 ms
• at DC	13,4g / 5 ms, 6,5g / 10 ms
mechanical service life (operating cycles)	
of contactor typical	10 000 000
 of the contactor with added electronically optimized auxiliary switch block typical 	5 000 000
of the contactor with added auxiliary switch block typical	10 000 000
reference code according to IEC 81346-2	Q
Substance Prohibitance (Date)	05/01/2012
SVHC substance name	Lead - 7439-92-1
Weight	5.917 kg
Ambient conditions	
installation altitude at height above sea level maximum	2 000 m
ambient temperature	
during operation	-25 +60 °C
during storage	-55 +80 °C
relative humidity minimum	10 %

relative humidity at 55 °C according to IEC 60068-2-30	95 %
maximum Main circuit	
number of poles for main current circuit	3
number of NO contacts for main contacts	3
operating voltage	
 at AC-3 rated value maximum 	1 000 V
at AC-3e rated value maximum	1 000 V
operational current	
 at AC-1 at 400 V at ambient temperature 40 °C rated value 	330 A
• at AC-1	
— up to 690 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	330 A
— up to 690 V at ambient temperature 60 $^{\circ}\text{C}$ rated value	300 A
— up to 1000 V at ambient temperature 40 $^{\circ}\text{C}$ rated value	150 A
 — up to 1000 V at ambient temperature 60 °C rated value • at AC-3 	150 A
— at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
— at 1000 V rated value	95 A
• at AC-3e	200 A
— at 400 V rated value	300 A
— at 500 V rated value	300 A
— at 690 V rated value	280 A
— at 1000 V rated value	95 A
• at AC-4 at 400 V rated value	280 A
 at AC-5a up to 690 V rated value 	290 A
 at AC-5b up to 400 V rated value 	249 A
• at AC-6a	
 up to 230 V for current peak value n=20 rated value 	292 A
 up to 400 V for current peak value n=20 rated value 	292 A
 up to 500 V for current peak value n=20 rated value 	292 A
 up to 690 V for current peak value n=20 rated value 	280 A
 up to 1000 V for current peak value n=20 rated value 	95 A
• at AC-6a	
— up to 230 V for current peak value n=30 rated value	195 A
— up to 400 V for current peak value n=30 rated value	195 A
— up to 500 V for current peak value n=30 rated value	195 A
— up to 690 V for current peak value n=30 rated value	195 A
 up to 1000 V for current peak value n=30 rated value 	95 A
minimum cross-section in main circuit at maximum AC-1 rated value	185 mm²
operational current for approx. 200000 operating cycles at AC-4	
• at 400 V rated value	125 A
at 690 V rated value	115 A
operational current	
at 1 current path at DC-1	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	33 A
— at 220 V rated value	3.8 A
— at 440 V rated value	0.9 A
— at 600 V rated value	0.6 A
• with 2 current paths in series at DC-1	
— at 24 V rated value	300 A
— at 60 V rated value	300 A

— at 110 V rated value	300 A
— at 220 V rated value	300 A
— at 440 V rated value	4 A
— at 600 V rated value	2 A
 with 3 current paths in series at DC-1 	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	300 A
— at 440 V rated value	11 A
— at 600 V rated value	5.2 A
• at 1 current path at DC-3 at DC-5	
— at 24 V rated value	300 A
— at 60 V rated value	11 A
— at 220 V rated value	0.6 A
— at 440 V rated value	0.18 A
— at 600 V rated value	0.125 A
 with 2 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	2.5 A
— at 440 V rated value	0.65 A
— at 600 V rated value	0.37 A
 with 3 current paths in series at DC-3 at DC-5 	
— at 24 V rated value	300 A
— at 60 V rated value	300 A
— at 110 V rated value	300 A
— at 220 V rated value	300 A
— at 440 V rated value	1.4 A
— at 600 V rated value	0.75 A
operating power	
• at AC-3	
— at 230 V rated value	90 kW
— at 400 V rated value	160 kW
— at 500 V rated value	200 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	132 kW
• at AC-3e	
— at 230 V rated value	90 kW
— at 400 V rated value	160 kW
— at 500 V rated value	200 kW
— at 690 V rated value	250 kW
— at 1000 V rated value	132 kW
operating power for approx. 200000 operating cycles at AC-	
• at 400 V rated value	71 kW
at 690 V rated value	112 kW
operating apparent power at AC-6a	
 up to 230 V for current peak value n=20 rated value 	110 000 kVA
 up to 400 V for current peak value n=20 rated value 	200 000 VA
• up to 500 V for current peak value n=20 rated value	250 000 VA
 up to 690 V for current peak value n=20 rated value 	330 000 VA
• up to 1000 V for current peak value n=20 rated value	160 000 VA
operating apparent power at AC-6a	
up to 230 V for current peak value n=30 rated value	70 000 VA
• up to 400 V for current peak value n=30 rated value	130 000 VA
 up to 500 V for current peak value n=30 rated value 	160 000 VA
 up to 690 V for current peak value n=30 rated value 	230 000 VA
• up to 1000 V for current peak value n=30 rated value	160 000 VA
short-time withstand current in cold operating state up to	

40 °C	
 limited to 1 s switching at zero current maximum 	5 524 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 5 s switching at zero current maximum 	4 579 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 10 s switching at zero current maximum 	3 153 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 30 s switching at zero current maximum 	1 883 A; Use minimum cross-section acc. to AC-1 rated value
 limited to 60 s switching at zero current maximum 	1 445 A; Use minimum cross-section acc. to AC-1 rated value
no-load switching frequency	
• at AC	2 000 1/h
• at DC	2 000 1/h
operating frequency	
• at AC-1 maximum	750 1/h
• at AC-2 maximum	250 1/h
at AC-3 maximum	500 1/h
at AC-3e maximum	500 1/h
• at AC-4 maximum	130 1/h
Control circuit/ Control	
type of voltage of the control supply voltage	AC/DC
closing delay	
• at AC	30 95 ms
• at DC	30 95 ms
opening delay	
• at AC	40 80 ms
• at AC • at DC	40 80 ms 40 80 ms
arcing time	10 15 ms
control version of the switch operating mechanism	Without operating mechanism
Auxiliary circuit	
number of NC contacts for auxiliary contacts instantaneous contact	2
number of NO contacts for auxiliary contacts instantaneous contact	2
operational current at AC-12 maximum	10 A
operational current at AC-15	
at 230 V rated value	6 A
at 400 V rated value	3 A
at 500 V rated value	2 A
at 690 V rated value	1 A
operational current at DC-12	
• at 24 V rated value	10 A
at 48 V rated value	6 A
at 60 V rated value	6 A
• at 110 V rated value	3 A
• at 125 V rated value	2 A
at 220 V rated value	1 A
• at 600 V rated value	0.15 A
operational current at DC-13	
at 24 V rated value	10 A
at 48 V rated value	2 A
at 60 V rated value	2 A
at 110 V rated value	1 A
at 125 V rated value	0.9 A
at 220 V rated value	0.3 A
at 600 V rated value	0.1 A
contact reliability of auxiliary contacts	1 faulty switching per 100 million (17 V, 1 mA)
UL/CSA ratings	. idealy outlooming per 100 million (17 V, 1 m/z)
full-load current (FLA) for 3-phase AC motor	202 A
at 480 V rated value	302 A
• at 600 V rated value	289 A
yielded mechanical performance [hp]	
• for 3-phase AC motor	400.1
— at 200/208 V rated value	100 hp
 — at 220/230 V rated value 	125 hp

at 4604-80 V rated value 250 hp 300 hp		
contact rating of auxiliary contacts according to U. According protection dissign of the fuse link - for short circuit protection of the main circuit — with type of coordination 1 required — with type of coordination 1 required — with type of assignment 2 required — size and or circuit protection of the auxiliary switch required with a constraint of the control or circuit and type of the circuit and type of the circuit control or circuit and type of control or circuit and cont	— at 460/480 V rated value	250 hp
Short-circular protection Heads thin Heads the fives time Heads the fives	— at 575/600 V rated value	300 hp
design of the fuse link • for short-circuit protection of the main circuit — with type of assignment 2 required — with type of assignment 2 required • for short-circuit protection of the auxiliary switch required • for short-circuit protection of the auxiliary switch required installization/mounting/climinations mounting position * yet Not (Silva) (S	contact rating of auxiliary contacts according to UL	A600 / Q600
in or short-circult protection of the main circuit	Short-circuit protection	
with type of assignment 2 required with a control or a con	design of the fuse link	
- with type of assignment 2 required * of short-circuit protection of the auxiliary switch required installation mounting position mounting position ** with vertical mounting surface +/-50" rotatable, with vertical mounting surfac	 for short-circuit protection of the main circuit 	
• for short-circuit protection of the auxiliary switch required Installation mounting dimensions mounting position **Exercise method side-by-side mounting Yes fastening method side-by-side mounting **Estening method **Begin method side-by-side mounting **Perfect method **Estening method **Begin method **Be	 — with type of coordination 1 required 	gG: 500 A (690 V, 100 kA)
* for short-sircult protection of the auxiliary switch required metablishing idimensions mounting position ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ***** ******	 — with type of assignment 2 required 	
installation/ mounting position mounting position fastening method side by side mounting fastening method side by side mounting fastening method screw fixing fastening method screw fixing fastening method screw fixing side to the fixing and beak for grounded pashing - with side-by side mounting - forwards - upwards - downwards - at the side - for grounded parts - forwards - upwards - upwards - the side - downwards - upwards - to fix le parts - forwards - upwards - the side - downwards - the side		
mounting position #ub vertical mounting surface #-60° relatable, with vertical mounting surface #-22° stillable to the front and back fastening method #ub vertical mounting #ub vertical work of the form of the for		gG. 10 A (500 V, 1 kA)
### Asstering method side-by-side mounting ### Asstering method		with vertical mounting ourface 1/00° ratetable, with vertical mounting ourface
festoning method height 210 mm width 145 mm depth 202 mm required spacing with side by-side mounting forwards upwards to mm downwards 10 mm downwards 10 mm forwards 10 mm downwards 10 mm do	mounting position	
height width	fastening method side-by-side mounting	Yes
width depth required spacing with side-by-side mounting - forwards - upwards - upwards - at the side - for grounded parts - forwards - upwards - at the side - for grounded parts - forwards - upwards - at the side - forwards - upwards - at the side - forwards - upwards - forwards - downwards - forwards - downwards - forwards - forwards - forwards - upwards - forwards - upwards - forwards - upwards - for manufaction - downwards - upwards - for manufaction - for manufaction - at the side - for manufaction - for MVG cables for manufaction - solid or stranded - solid or	fastening method	screw fixing
depth required spacing with side-by-side mounting —forwards — upwards — odwnwards — of the side — of grounded parts — forwards — upwards — upwards — of manied by side by side mounting — of the side — of grounded parts — forwards — upwards — upwards — ownwards — ownwards — ownwards — of line — downwards — of line — ownwards — ownwards — ownwards — ownwards — ownwards — upwards — ownwards — upwards — upwards — upwards — ownwards — ownwar	height	210 mm
required spacing • with side-by-side mounting — forwards — upwards — of many and a content of the side • for grounded parts — forwards — upwards — upwards — upwards — upwards — the side — to mm — at the side — downwards — downwards — for live parts — forwards — forwards — downwards — to mm — of a the side — downwards — upwards — upwards — to mm — downwards — upwards — to mm — downwards — upwards — upwards — upwards — upwards — to mm — other side — upwards — u	width	145 mm
required spacing with side-by-side mounting — forwards — upwards — downwards — of the side — for grounded parts — forwards — upwards — upwards — upwards — of grounded parts — of grounded parts — at the side — downwards — upwards — 10 mm — at the side — downwards — 10 mm — of live parts — forwards — forwards — upwards — 10 mm — of rive parts — forwards — upwards — to mm — downwards — upwards — to mm — of ownwards — upwards — to mm — of ownwards — upwards — of mm — of ownwards — upwards — to mm — of ownwards — upwards — u		
forwards upwards 10 mm 10 m	·	
forwards upwards 10 mm 10 m	with side-by-side mounting	
- downwards - at the side 0 mm - at the side 0 mm - forwards - upwards 10 mm - upwards 10 mm - downwards 10 mm - upwards 10 mm - upwards 10 mm - downwards 10 mm - for main current circuit 20 connection bar 20 connection bar 30 connectable conductor cross-sections 40 connectable conductor cross-sections 40 connectable conductor cross-sections 40 connectable conductor cross-sections 40 connectable conductor cross-section 50 connectable conductor cross-sections 40 connectable conductor cross-sections 50 connectable conductor cross-section 50 connectable conductor cross-section 50 connectable conductor cross-section 50 connectable conductor cross-section 50 connecta		20 mm
- downwards - at the side	— upwards	10 mm
• for grounded parts — forwards — upwards — at the side — downwards • for live parts — forwards — upwards — upwards — to fine parts — forwards — upwards — to mm — downwards — to mm — downwards — to mm — at the side — to mm — to main current circuit — for auxiliary and control circuit — if or auxiliary contacts — of magnet coil width of connection bar diameter of holes — titlickness of connection bar diameter of holes — titlickness of connectable conductor cross-sections — if or AWG cables for main contacts — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — solid or stranded — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or stranded — finely stranded with core end processing — for auxiliary contacts — solid or	•	10 mm
	— at the side	0 mm
- upwards - at the side - downwards - for live parts - forwards - for live parts - forwards - upwards - downwards - at the side - downwards - at the side - to mm - to mm - to mm - to mm - to main current circuit - for auxiliary and control circuit - for auxiliary and control circuit - at contactor for auxiliary contacts - of magnet coil - screw-type terminals - of magnet coil - screw-type terminals - of magnet coil - screw-type terminals - thickness of connection bar - thickness of connection bar - thickness of connection bar - thickness of connectable conductor cross-sections - for AWG cables for main contacts - stranded - finely stranded with core end processing - solid or stranded - solid or s	 for grounded parts 	
at the side downwards for live parts forwards for live parts downwards lomm for main current circuit for auxiliary and control circuit screw-type terminals end to contactor for auxiliary contacts for main current of auxiliary contacts screw-type terminals end to contact for auxiliary contacts for main cortect for auxiliary contacts for main cortect for auxiliary contacts end for main contacts end for auxiliary contacts end finely stranded with core end processing end for auxiliary contacts	— forwards	20 mm
- downwards • for live parts - forwards - upwards - upwards - downwards - at the side 10 mm - downwards - at the side 10 mm Connection/Terminals type of electrical connection • for auxiliary and control circuit • for auxiliary and control circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil width of connection bar diameter of holes 11 mm number of holes 11 mm number of holes 11 type of connectable conductor cross-sections • for AWG cables for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for fawG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for fawG cables for auxiliary contacts - solid or stranded - finely stra	— upwards	10 mm
• for live parts — forwards — upwards — downwards — at the side Connections/ Terminals type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil width of connection bar diameter of holes 1 type of connectable conductor cross-section for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for AWG cables for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	— at the side	10 mm
forwards	— downwards	10 mm
- upwards - downwards - 10 mm - downwards - at the side 10 mm - at the side 10 mm - downwards - at the side 10 mm - downwards - at the side 10 mm - downwards - do	• for live parts	
- downwards - at the side 10 mm Connections/ Terminals type of electrical connection • for main current circuit Connection bar screw-type terminals • at contactor for auxiliary contacts • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • of magnet coil Screw-type terminals • thickness of connection bar 6 mm diameter of holes 11 mm number of holes 11 mm number of holes 1 type of connectable conductor cross-sections • for AWG cables for main contacts • stranded 70 240 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded 0.5 2.5 mm² type of connectable conductor cross-sections • for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) • for AWG cables for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) • for auxiliary contacts 18 14	— forwards	20 mm
Type of electrical connection of or auxiliary and control circuit of or auxiliary contacts of magnet coil width of connection bar diameter of holes of holes of nawG cables for main contacts ostranded connectable conductor cross-section for auxiliary contacts of stranded connectable conductor cross-sections of nauxiliary contacts of or auxiliary contacts osolid or stranded of or auxiliary contacts - solid - solid or stranded - finely stranded with core end processing of nAWG cables for auxiliary contacts of auxiliary contacts - solid or stranded - finely stranded with core end processing of AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing of or auxiliary contacts - solid or stranded - finely stranded with core end processing of AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing of AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing of AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing of auxiliary contacts - solid or stranded - finely stranded with core end processing of auxiliary contacts - solid or stranded - solid or	— upwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil width of connection bar thickness of connection bar diameter of holes • for AWG cables for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded • for auxiliary contacts • for AWG cables for main condects • solid or stranded • for auxiliary contacts • for AWG cables for main conductor cross-sections • for AWG connectable conductor cross-section for auxiliary contacts • solid or stranded • for auxiliary contacts • solid or stranded • for auxiliary contacts • solid or stranded • for auxiliary contacts • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts • for auxiliary contacts	— downwards	10 mm
type of electrical connection • for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • of magnet coil width of connection bar thickness of connection bar diameter of holes 11 mm number of holes 12/0 500 kcmil connectable conductor cross-sections • for AWG cables for main contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts • solid or stranded — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • for auxiliary contacts	— at the side	10 mm
• for main current circuit • for auxiliary and control circuit • at contactor for auxiliary contacts • at contactor for auxiliary contacts • of magnet coil width of connection bar thickness of connection bar diameter of holes 11 mm number of holes 12/0 500 kcmil connectable conductor cross-sections • for AWG cables for main contacts • stranded connectable conductor cross-section for main contacts • solid or stranded • finely stranded with core end processing for auxiliary contacts - solid - solid - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing • for auxiliary contacts - solid or stranded - finely stranded with core end processing - for AWG cables for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - solid or stranded - finely stranded with core end processing - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts - for auxiliary contacts	Connections/ Terminals	
 for auxiliary and control circuit at contactor for auxiliary contacts of magnet coil Screw-type terminals screw-type terminals width of connection bar diameter of holes 11 mm number of holes for AWG cables for main contacts stranded connectable conductor cross-section for auxiliary contacts stranded solid or stranded with core end processing for auxiliary contacts a solid or stranded - solid - solid or stranded with core end processing for AWG cables for auxiliary contacts for auxiliary contacts for auxiliary contacts for auxiliary contacts for alignity stranded with core end processing for auxiliary contacts for alignity stranded with core end processing for AWG cables for auxiliary contacts for auxiliary con	type of electrical connection	
 at contactor for auxiliary contacts of magnet coil Screw-type terminals width of connection bar thickness of connection bar 6 mm diameter of holes 11 mm number of holes for AWG cables for main contacts stranded connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing for auxiliary contacts a for auxiliary contacts - solid - solid - solid or stranded - solid or stranded - w (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) - finely stranded with core end processing for AWG cables for auxiliary contacts - for for auxiliary contacts 	for main current circuit	Connection bar
of magnet coll width of connection bar thickness of connection bar diameter of holes number of holes 11 mm number of holes 1 type of connectable conductor cross-sections • for AWG cables for main contacts • stranded connectable conductor cross-section for main contacts • stranded	 for auxiliary and control circuit 	screw-type terminals
width of connection bar thickness of connection bar diameter of holes 11 mm number of holes 1 type of connectable conductor cross-sections • for AWG cables for main contacts • stranded connectable conductor cross-section for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded finely stranded with core end processing • for auxiliary contacts • solid — solid — solid or stranded —	 at contactor for auxiliary contacts 	Screw-type terminals
thickness of connection bar diameter of holes 11 mm number of holes 1 type of connectable conductor cross-sections • for AWG cables for main contacts • stranded connectable conductor cross-section for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts - solid - solid - solid - solid - finely stranded with core end processing • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts - finely stranded with core end processing • for AWG cables for auxiliary contacts - finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	of magnet coil	Screw-type terminals
diameter of holes 11 mm number of holes 1 type of connectable conductor cross-sections for AWG cables for main contacts stranded stranded connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing 0.5 4 mm² type of connectable conductor cross-sections 0.5 2.5 mm² for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section	width of connection bar	25 mm
number of holes 1 type of connectable conductor cross-sections 2/0 500 kcmil of r AWG cables for main contacts 2/0 500 kcmil connectable conductor cross-section for main contacts 70 240 mm² osolid or stranded 0.5 4 mm² of inely stranded with core end processing 0.5 2.5 mm² type of connectable conductor cross-sections 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - solid or stranded 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) of or AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section 18 14	thickness of connection bar	6 mm
type of connectable conductor cross-sections • for AWG cables for main contacts • stranded 70 240 mm² connectable conductor cross-section for auxiliary contacts • stranded 70 240 mm² connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing • for auxiliary contacts — solid — solid — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	diameter of holes	11 mm
 ● for AWG cables for main contacts Connectable conductor cross-section for main contacts ● stranded To 240 mm² Connectable conductor cross-section for auxiliary contacts ● solid or stranded ● finely stranded with core end processing Use of connectable conductor cross-sections ● for auxiliary contacts — solid — solid or stranded — solid or stranded — finely stranded with core end processing — finely stranded with core end processing — finely stranded with core end processing ● for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section ● for auxiliary contacts 18 14 	number of holes	1
connectable conductor cross-section for main contacts • stranded connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — solid — solid or stranded	type of connectable conductor cross-sections	
 stranded connectable conductor cross-section for auxiliary contacts solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) — solid or stranded — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section for auxiliary contacts 18 14 	for AWG cables for main contacts	2/0 500 kcmil
connectable conductor cross-section for auxiliary contacts • solid or stranded • finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts - solid - solid or stranded - finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 4x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 5x (20 16), 2x (18 14), 1x 12	connectable conductor cross-section for main contacts	
 solid or stranded finely stranded with core end processing type of connectable conductor cross-sections for auxiliary contacts — solid — solid or stranded — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts for auxiliary contacts for auxiliary contacts 18 14 	• stranded	70 240 mm²
• finely stranded with core end processing type of connectable conductor cross-sections • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	connectable conductor cross-section for auxiliary contacts	
type of connectable conductor cross-sections • for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing • for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	 solid or stranded 	0.5 4 mm²
 for auxiliary contacts — solid — solid or stranded — finely stranded with core end processing for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section for auxiliary contacts 18 14 	finely stranded with core end processing	0.5 2.5 mm ²
— solid 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²) — solid or stranded 2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²) — finely stranded with core end processing 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) • for AWG cables for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section • for auxiliary contacts • for auxiliary contacts 18 14	type of connectable conductor cross-sections	
 — solid or stranded — finely stranded with core end processing ● for AWG cables for auxiliary contacts ■ for auxiliary contacts Exection ■ for auxiliary contacts 2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²) 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section ■ for auxiliary contacts 18 14 	 for auxiliary contacts 	
 — finely stranded with core end processing ● for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section ● for auxiliary contacts 18 14 	— solid	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²), max. 2x (0.75 4 mm²)
 ◆ for AWG cables for auxiliary contacts AWG number as coded connectable conductor cross section ◆ for auxiliary contacts 2x (20 16), 2x (18 14), 1x 12 AWG number as coded connectable conductor cross section ◆ for auxiliary contacts 18 14 	— solid or stranded	2x (0,5 1,5 mm²), 2x (0,75 2,5 mm²), max. 2x (0,75 4 mm²)
AWG number as coded connectable conductor cross section • for auxiliary contacts 18 14	 finely stranded with core end processing 	2x (0.5 1.5 mm²), 2x (0.75 2.5 mm²)
section ● for auxiliary contacts 18 14	for AWG cables for auxiliary contacts	2x (20 16), 2x (18 14), 1x 12
Safety related data	for auxiliary contacts	18 14
	Safety related data	

product function	
 mirror contact according to IEC 60947-4-1 	Yes
 positively driven operation according to IEC 60947-5-1 	No
 suitable for safety function 	Yes
suitability for use safety-related switching OFF	Yes
service life maximum	20 a
test wear-related service life necessary	Yes
proportion of dangerous failures	
 with low demand rate according to SN 31920 	40 %
 with high demand rate according to SN 31920 	73 %
B10 value with high demand rate according to SN 31920	1 000 000
failure rate [FIT] with low demand rate according to SN 31920	100 FIT
ISO 13849	
device type according to ISO 13849-1	3
overdimensioning according to ISO 13849-2 necessary	Yes
IEC 61508	
safety device type according to IEC 61508-2	Type A
Electrical Safety	
protection class IP on the front according to IEC 60529	IP00; IP20 with box terminal/cover
touch protection on the front according to IEC 60529	finger-safe, for vertical contact from the front with box terminal/cover
Approvals Certificates	
General Product Approval	







Confirmation



<u>KC</u>

General Product Approval

EMV

Functional Saftey

Test Certificates

Marine / Shipping





Type Examination Certificate

Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report



Marine / Shipping







Confirmation

other

Miscellaneous

Railway other **Environment**

Miscellaneous Special Test Certific-

ate

Environmental Con-firmations

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

Information- and Downloadcenter (Catalogs, Brochures,...)

https://www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3RT1066-6LA06

Cax online generator

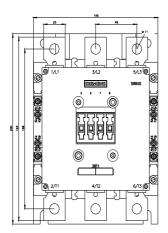
 $\underline{\text{http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en\&mlfb=3RT1066-6LA06}$

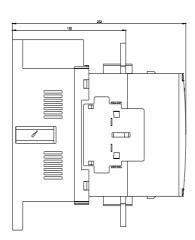
Service&Support (Manuals, Certificates, Characteristics, FAQs,...) https://support.industry.siemens.com/cs/ww/en/ps/3RT1066-6LA06

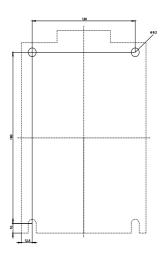
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

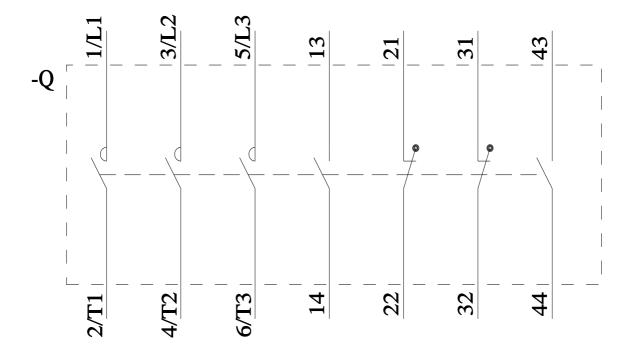
http://www.automation.siemens.com/objects/ us.set/ us. https://support.industry.siemens.com/cs/ww/en/ps/3RT10

Further characteristics (e.g. electrical endurance, switching frequency)
http://www.automation.siemens.com/bilddb/index.aspx?view=Search&mlfb=3RT1066-6LA06&objecttype=14&gridview=view1









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